

AMENDMENTS TO THE CLAIMS

Please amend claims 1, 6, 9, 13 and 31 as follows.

Please add new claims 40-48 as follows.

Please cancel claims 2, 17-19, 21-22, 25, 30, 38 and 39 without prejudice or disclaimer.

This listing of claims below will replace all prior versions, and listings, of claims in this application.

Listing of Claims:

1. **(Currently Amended)** An in-vivo sensing device for sensing in the gastrointestinal tract of a patient comprising:
a first part having a ~~first~~ specific gravity of less than one or approximately one;
and
a second part having a ~~second~~ specific gravity of more than one;[[,]]
a fastener detachably connecting wherein the first part and the second part are detachable; and
means for detaching the first part and the second part during the passage of said device through said gastrointestinal tract;
wherein, when the first part and second part are connected, the specific gravity of the device is greater than one.
2. **(Canceled)**
3. **(Currently Amended)** The in-vivo sensing device according to claim 1 wherein the ~~second~~ specific gravity of the first part is less than the specific gravity of a bodily fluid within a body lumen.
4. **(Original)** The in-vivo sensing device according to claim 1 comprising an imager and an illumination source.

APPLICANT(S): FRISCH, Mordechai et al.
SERIAL NO.: 10/585,053
FILED: May 28, 2007
Page 3

5. (Canceled)
6. (Currently Amended) The in-vivo sensing device according to claim 1 wherein said fastener comprising comprises a filament to temporarily attach the first part to the second part.
- 7-8. (Canceled)
9. (Withdrawn)(Currently Amended) The in-vivo sensing device according to claim 1 wherein said fastener comprising comprises a magnet, to temporarily attach the first part and the second part by an electromagnetic force.
- 10-12. (Canceled)
13. (Currently Amended) The in-vivo device according to claim 1 wherein the first part is configured to detach in-vivo from the second part based on a predetermined parameter.
- 14-30. (Canceled)
31. (Currently Amended) A system for in-vivo sensing comprising:
an in-vivo sensing device for sensing in the gastrointestinal tract of a patient
comprising:
a first part having a first specific gravity of less than one or approximately one;
a second part having a second specific gravity of more than one;[[,]]
wherein the first specific gravity is different from the second specific gravity and
a fastener detachably connecting the first part and the second part are attached by a releasable fastener; and
means for detaching the first part and the second part during the passage of said device through said gastrointestinal tract;

wherein, when the first part and second part are connected, the specific gravity of the device is greater than one;
an external receiver to receive wireless signals from the in-vivo device.

32. (Original) The system according to claim 31 comprising an in-vivo imager.
33. (Canceled)
34. (Original) The system according to claim 31 comprising an external transmitter for transmitting signals to the in-vivo device.
- 35-36. (Canceled)
37. (Original) The system according to claim 31 comprising a display to display sensed data from the in-vivo sensing device.
- 38-39. (Canceled)
40. (New) The in-vivo sensing device according to claim 1, wherein the first part is activated upon detachment from the second part.
41. (New) The in-vivo sensing device according to claim 1, wherein the second part is activated upon detachment from the first part.
42. (New) The in-vivo sensing device according to claim 13, wherein the predetermined parameter is a lapse of a predetermined period of time or a sensed environmental condition.
43. (New) The in-vivo sensing device according to claim 42, wherein the sensed environmental condition is a body temperature, an exposure to a certain liquid in a body lumen, or a pH level.

APPLICANT(S): FRISCH, Mordechai et al.
SERIAL NO.: 10/585,053
FILED: May 28, 2007
Page 5

44. (New) The in-vivo sensing device according to claim 1, wherein the first part or second part encapsulates medicaments that may be released upon the detachment of the second part or first part, respectively.
45. (New) The in-vivo sensing device according to claim 1, wherein the first part and second part are caused to detach by ultrasound waves.
46. (New) The in-vivo sensing device according to claim 1, wherein the in-vivo sensing device comprises a photodiode switch.
47. (New) The in-vivo sensing device according to claim 1, wherein the in-vivo sensing device comprises a motion detector.
48. (New) The system according to claim 34 wherein the external transmitter is an ultrasound transmitter.